

09/736,334

PATENT
8733.321.00

ABSTRACT OF THE DISCLOSURE

A liquid crystal display device, and a fabricating method thereof, with improved bonding of an upper plate to a lower plate. The lower plate includes an organic protective film over an inorganic gate insulating layer that is on a substrate. Channels through the organic protective film expose either metal patterns or the gate insulating layer. A seal coated with a sealant is then placed over the organic protective film and channels. The sealant passes through the channels to the metal patterns or to the gate insulating layer. Bonding of the seal to the lower plate is improved by the sealant that contacts the metal patterns and/or the gate insulating layer. During LCD fabrication, the metal patterns act as etch stops when etching the channels. Alternatively, an etch stop semiconductor layer is placed on the gate insulating film. The etch stops prevent the etching process from exposing the lower substrate.

09/736,334-1,1500